

## SUPPLEMENTAL MATERIAL

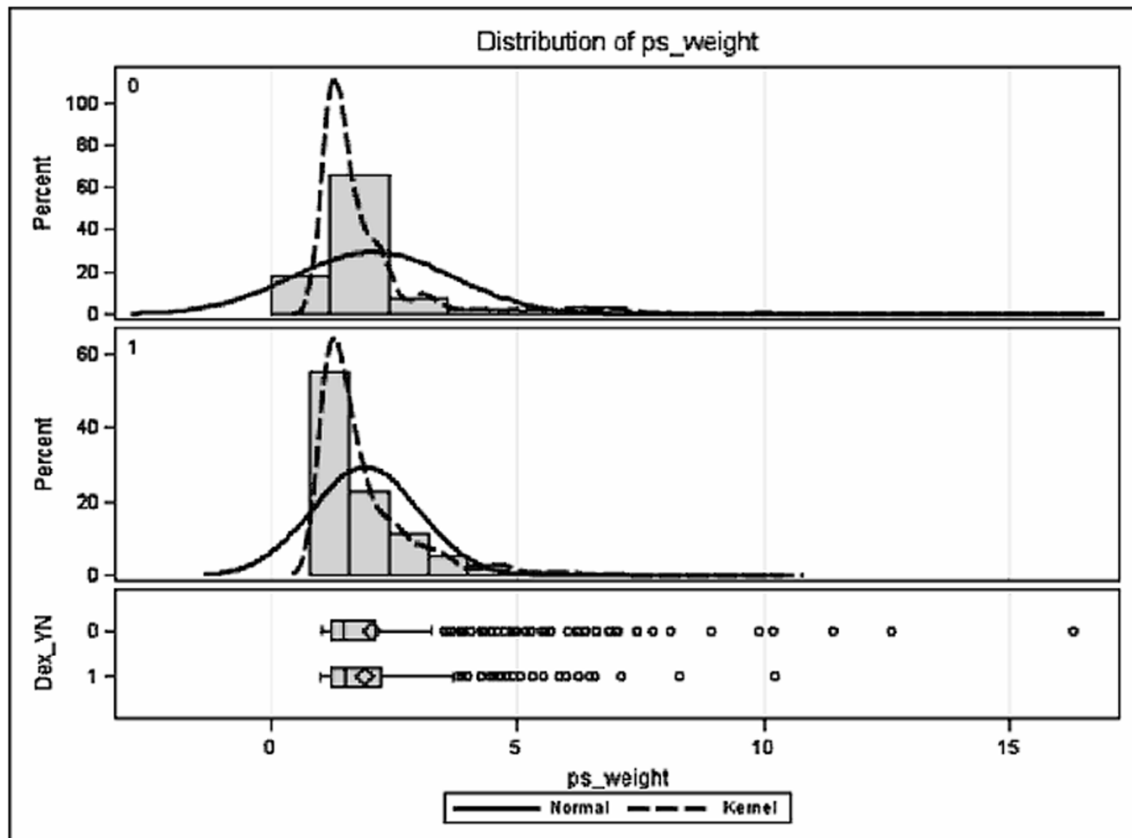
**Supplemental Table1. The definitions of outcomes in STS (Version 2.73)**

Postoperative events	Definition	Page
Permanent stroke	Whether the patient has a postoperative stroke (any confirmed neurological deficit of abrupt onset caused by a disturbance in cerebral blood supply) that did not resolve within 24 hours.	685
TIA	A loss of neurological function that was abrupt in onset but with complete return of function within 24 hours.	686
Coma	A new postoperative coma that persisted for at least 24 hours secondary to anoxic/ischemic and/or metabolic encephalopathy, thromboembolic event or cerebral bleed.	687
Delirium	Illusions, confusion and cerebral excitement in the post-operative period and having a comparatively short course.	30
Perioperative MI	<24 hours post-op: CK-MB greater than or equal to 5 times the upper limit of normal, with or without new Q waves present in two or more contiguous ECG leads, no symptoms required; or > 24 hours post-op: at least one of the following criteria: evolutionary ST- segment elevations, development of new Q- waves in two or more contiguous ECG leads, new LBBB pattern on the ECG, CK-MB greater than or equal to 3 times the upper limit of normal.	674
Heart block	New onset requiring the implantation of a permanent pacemaker of any type prior to discharge	695
RF	Acute or worsening renal failure resulting in one or more of the following: increase in serum creatinine >2.0 mg/dL or two-fold increase of most recent preoperative serum creatinine or a new requirement for dialysis.	692
Sepsis	A systemic inflammatory response syndrome is present when at least two of the following criteria are present: hypo-or hyperthermia (>38.5 or <36.0), tachycardia or bradycardia, tachypnea, leukocytosis or leukopenia, and thrombocytopenia.	684
Any complication	All postoperative complications occurring during the hospitalization, including the entire postoperative period up to discharge, even if over 30 days.	669
Mort-mortality	Indicate whether the patient has been declared dead within this hospital or any time after discharge from this hospitalization.	702

STS, Society of Thoracic Surgeons National Adult Cardiac Surgery Database; TIA, Transient ischemic attack; MI, myocardial infarction; CK-MB, creatine phosphokinase-MB; ECG, electrocardiograph; RF, Renal failure.

<http://www.sts.org/documents/pdf/trainingmanuals/adult2.73/V-cAdultCVDDataSpecifications2.73.pdf> (accessed on May 30, 2012)

Supplemental Figure 1



Supplemental Figure 1. The distribution of propensity score (ps) weight. Dex\_YN, patients received dexmedetomidine or those who did not.